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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,744	11/20/2003	Felix M. Sciulli	340058.534D1	8795
500	7590	04/11/2006	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			PRONE, JASON D	
701 FIFTH AVE			ART UNIT	
SUITE 6300			PAPER NUMBER	
SEATTLE, WA 98104-7092			3724	

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/717,744

Applicant(s)

SCIULLI ET AL.

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-28-06</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Warehime (5,782,673).

In regards to claim 1, Chalmers discloses the same invention including a mixing tube comprising a body (472) having a bore extending there through along a longitudinal axis (138) and being formed to withstand the passage of a high-pressure fluid jet (Title), a collar rigidly fixed to an outer surface of the mixing tube in an upper region of the mixing tube (464, In the position shown in Figure 12, the collar 464 is clearly rigidly fixed to the tube 472, if it were not rigidly fixed the tube would not stay connected to the main body while in use), and the collar being sized and capable of sliding upward through a bore of a cutting head (462) and having a terminal end surface of the collar substantially normal to the longitudinal axis to bottom out against a surface of a member in the bore of the cutting head substantially normal to the longitudinal axis to prevent the mixing tube from being inserted any further into the cutting head (top surface of 464 bottoms out against the bottom surface of 456. Both are normal to 138).

In regards to claims 4 and 5, Chalmers discloses the outer surface of the collar is substantially cylindrical (464), and the outer surface of the collar is substantially frusto-conical (464).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warehime in view Yie (4,555,872). Warehime discloses the invention but fails to disclose the distance from a top surface of the mixing tube to a bottom surface of the collar is 0.02-2.0 inches and the wall thickness of the collar is 0.01-0.2 inches. Yie (4,555,872) discloses specific dimensions for a fluid jet apparatus (Columns 16-17, example II). The support cone (60) with a passage (61) in Yie (4,555,872) is similar to holder (62) and passage (67) in Warehime and would, therefore, be on a similar order of size. Moreover, Yie (4,555,872) teaches a support cone/holder that has a diameter of 0.49 inches with a passage bore diameter of 0.15 inches. In view of the disclosed dimensions in Yie (4,555,872) and that the structure in Warehime and Yie (4,555,872) are on the same order, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have made the distance between the top surface of the mixing tube and a bottom surface of the collar in Chalmers 0.02-2.0 inches and the wall thickness of the collar 0.01-0.2 inches. Additionally, to any degree that it can be argued

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that it is speculative that Warehime is on the same order of size as the fluid jet apparatus in Yie (4,555,872), in view of their similarities in structure and function, such similarities in size would have been obvious to reproduce to meet established standards.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warehime in view of Yie (4,945,688). Warehime discloses the invention including the collar is surrounded by a nut (458).

However, Warehime fails to disclose the outer surface of the nut being threaded to engage a threaded inner surface of a cutting head.

Yie (4,945,688) teaches that it is old and well known in the art of fluid jet cutting to incorporate an outer surface of the nut being threaded (82) to engage a threaded inner surface of a cutting head (Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Warehime with an outside threaded nut, as taught by Yie (4,945,688), to allow for an alternate well known nozzle attachment.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

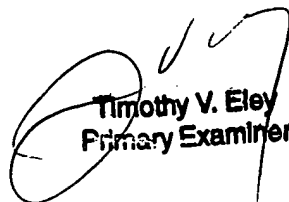
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JP

April 04, 2006

A handwritten signature, possibly reading "JP", is written in black ink.A handwritten signature, possibly reading "Timothy V. Eley", is written in black ink.

**Timothy V. Eley**  
**Primary Examiner**